

7/18/95

FILE COPY

Page 1 of 36

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT		ATTY. DOCKET NO. 1488.0770007	APPLICATION NO. 09/340,690
		APPLICANT NI et al.	SEP 30 1999 C 63 PATENT & TRADEMARK OFFICE
		FILING DATE June 29, 1999	

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
HD	AA1 5,310,662	05/10/1994	Evans et al.	435	62	06/08/1993
	AB1 5,359,039	10/25/1994	Smith et al.	530	350	07/09/1993
	AC1 5,395,760	03/07/1995	Smith et al.	435	240.1	05/10/1990
	AD1 5,447,851	09/05/1995	Beutler et al.	435	69.7	04/02/1992
	AE1 5,464,938	11/07/1995	Smith et al.	530	350	08/18/1994
	AF1 5,605,690	02/25/1997	Jacobs et al.	424	134.1	02/08/1995

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
HD	AL1 WO 91/09045	06/27/1991	WIPO			Yes No
	AM1 CA 2,045,869	12/29/1991	Canada			Yes No
	AN1 WO 93/20219	10/14/1993	WIPO			Yes No
	A01 EP 0 585 939 A2	03/09/1994	Europe			Yes No
	AP1 WO 94/09137	04/28/1994	WIPO			Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

<i>SPW</i>	AR	1	Adams, M.D., et al., "Complementary DNA Sequencing: Expressed Sequence Tags and Human Genome Project," <i>Science</i> 252:1651-1656 (1991)
	AS	1	Adams, M.D., et al., "Sequence identification of 2,375 human brain genes," <i>Nature</i> 355:632-634 (1992)
	AT	1	Aggarwal, B.B., and Natarajan, K., "Tumor necrosis factors: Developments during the last decade," <i>Eur. Cytokine Netw.</i> 7:93-124 (May 1996)

EXAMINER	<i>SPW</i>	DATE CONSIDERED
----------	------------	-----------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

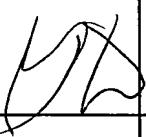
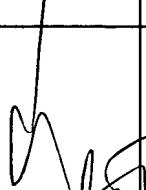
FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT		ATTY. DOCKET NO. 1488.0770007	APPLICATION NO. 09/340,690
		APPLICANT NI et al.	SEP 30 1999 P A T E N T & T R A D E M A R K O F F I C E U. S. P A T E N T O F F I C E 1646
		FILING DATE June 29, 1999	
U. S. PATENT DOCUMENTS			

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
AA5						
AB5						
AC5						
AD5						
AE5						
AF5						
AG5						
AH5						
AI5						
AJ5						
AK5						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
AL5						Yes No
AM5						Yes No
AN5						Yes No
AO5						Yes No
AP5						Yes No

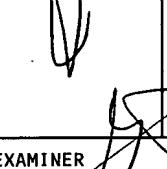
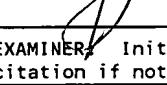
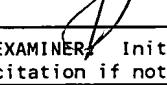
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	5	Camerini, D., et al., "The T Cell Activation Antigen CD27 Is a Member of the Nerve Growth Factor/Tumor Necrosis Factor Receptor Gene Family," <i>J. Immunol.</i> 147:3165-3169 (1991)
	AS	5	Chang, et al., "Identification of a new member of the steroid receptor superfamily by cloning and sequence analysis," <i>Biochem. Biophys. Res. Comm.</i> 155:971-977 (1988)
	AT	5	Chinnaiyan, A.M., et al., "Signal Transduction by DR3, a Death Domain-Containing Receptor Related to TNFR-1 and CD95," <i>Science</i> 274:990-992 (1996)

EXAMINER	DATE CONSIDERED
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.	

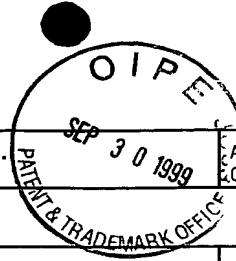
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT					ATTY. DOCKET NO. 1488.0770007	APPLICATION NO. 09/340,690		
					APPLICANT NI et al.			
					FILING DATE June 29, 1999	GROUP 1646	1647	
U.S. PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE	
								
FOREIGN PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
							Yes No	
							Yes No	
							Yes No	
							Yes No	
							Yes No	
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)								
	AR	8	Himmler, A., et al., "Molecular Cloning and Expression of Human and Rat Tumor Necrosis Factor Receptor Chain (p60) and Its Soluble Derivative, Tumor Necrosis Factor-Binding Protein," <i>DNA and Cell Biol.</i> 9:705-715 (1990)					
	AS	8	Hohmann, H.-P., et al., "Two Different Cell Types Have Different Major Receptors for Human Tumor Necrosis Factor (TNF α)," <i>J. Biol. Chem.</i> 264:14927-14934 (1989)					
	AT	8	Howard, S.T., et al., "Vaccinia Virus Homologues of the Shope Fibroma Virus Inverted Terminal Repeat Proteins and a Discontinuous ORF Related to the Tumor Necrosis Factor Receptor Family," <i>Virology</i> 180:633-647 (1991)					
EXAMINER					DATE CONSIDERED 9/01			

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>				ATTY. DOCKET NO. 1488.0770007	APPLICATION NO. 09/340,690		
				APPLICANT NI et al.	FILING DATE June 29, 1999	GROUP 1646	<i>1647</i>
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
							
FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
							Yes
							No
							Yes
							No
							Yes
							No
							Yes
							No
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)							
	AR	9	Hsu, K.C., and Chao, M.V., "Differential Expression and Ligand Binding Properties of Tumor Necrosis Factor Receptor Chimeric Mutants," <i>J. Biol. Chem.</i> 268:16430-16436 (1993)				
	AS	9	Hu, F.-Q., et al., "Cowpox Virus Contains Two Copies of an Early Gene Encoding a Soluble Secreted Form of the Type II TNF Receptor," <i>Virology</i> 204:343-356 (October 1994)				
	AT	9	Inui, S., et al., "Identification of the intracytoplasmic region essential for signal transduction through a B cell activation molecule, CD40," <i>Eur. J. Immunol.</i> 20:1747-1753 (1990)				
EXAMINER 					DATE CONSIDERED <i>9/02</i>		
EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.							

FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>			ATTY. DOCKET NO. 1488.0770007		APPLICATION NO. 09/340,690		
			APPLICANT NI et al.		FILING DATE June 29, 1999		GROUP 16A6
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
							Yes
							No
							Yes
							No
							Yes
							No
							Yes
							No
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)							
	AR	10	Itoh, N., et al., "The Polypeptide Encoded by the cDNA for Human Cell Surface Antigen Fas Can Mediate Apoptosis," <i>Cell</i> 66:233-243 (1991)				
	AS	10	Johnson, D., et al., "Expression and Structure of the Human NGF Receptor," <i>Cell</i> 47:545-554 (1986)				
	AT	10	Krammer, P.H., et al., "Regulation of apoptosis in the immune system," <i>Curr. Opin. Immunol.</i> 6:279-289 (April 1994)				
EXAMINER					DATE CONSIDERED		
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.							

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 1488.0770007 APPLICANT NI et al. FILING DATE June 29, 1999	<i>SEP 30 1999</i> PATENT & TRADEMARK OFFICE U.S. DEPARTMENT OF COMMERCE GROUP 1646 / 1647	APPLICATION NO. 09/340,690
-----------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>13</u>	Montgomery, R.I., et al., "A New Member of the TNG/NGF Receptor Family Can Mediate Herpes Simplex Virus 1 Entry Into Cells," <i>Eur. Cytokine Netw.</i> 7:159, Abstract No. L7 (1996)
	AS	<u>13</u>	Muzio, M., et al., "FLICE, A Novel FADD-Homologous ICD/CED-3-like Protease, Is Recruited to the CD95 (Fas/APO-1) Death-Inducing Signaling Complex, <i>Cell</i> 85:817-827 (June 1996)
	AT	<u>13</u>	Nophar, Y., et al., "Soluble forms of tumor necrosis factor receptors (TNF-Rs). The cDNA for the type 1 TNF-R, cloned using amino acid sequence data of its soluble form, encodes both the cell surface and a soluble form of the receptor," <i>EMBO J.</i> 9:3269-3278 (1990)

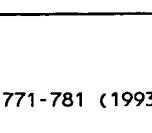
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 1488.0770007 APPLICANT NI et al. FILING DATE June 29, 1999	 SEP 30 1999 PATENT & TRADEMARK OFFICE APPLICATION NO. 09/340,690 GROUP 1646 1647
-----------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

	AR	<u>14</u>	Pfeffer, K., et al., "Mice Deficient for the 55 kd Tumor Necrosis Factor Receptor Are Resistant to Endotoxic Shock, yet Succumb to L. monocytogenes Infection," <i>Cell</i> 73:457-467 (1993)
	AS	<u>14</u>	Piguet, P.F., et al., "Evolution of collagen arthritis in mice is arrested by treatment with anti-tumor necrosis factor (TNF) antibody or a recombinant soluble TNF receptor," <i>Immunol.</i> 77:510-514 (1992)
	AT	<u>14</u>	Pollock, K.E., et al., "Inducible T Cell Antigen 4-1BB," <i>J. Immunol.</i> 150:771-781 (1993)
EXAMINER 	DATE CONSIDERED 		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 1488.0770007  APPLICATION NO. 09/340,690
APPLICANT NI et al.	
FILING DATE June 29, 1999	
GROUP 1646	

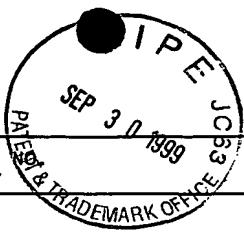
U.S. PATENT DOCUMENTS

FOREIGN PATENT DOCUMENTS

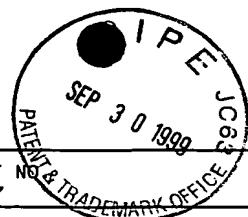
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

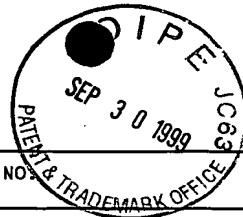
	AR	<u>15</u>	Radeke, M.J., et al., "Gene transfer and molecular cloning of the rat nerve growth factor receptor," <i>Nature</i> 325:593-597 (1987)
	AS	<u>15</u>	Rossol-Voth, R., et al., "In vivo protective effect of tumor necrosis factor α against experimental infection with herpes simplex virus type 1," <i>J. Gen. Virol.</i> 72:143-147 (1991)
	AT	<u>15</u>	Rothe, M., et al., "A Novel Family of Putative Signal Transducers Associated with the Cytoplasmic Domain of the 75 kDa Tumor Necrosis Factor Receptor," <i>Cell</i> 78:681-692 (August 1994)

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



EXAMINER Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

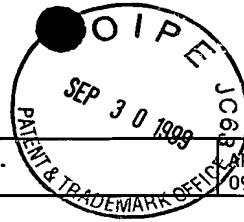




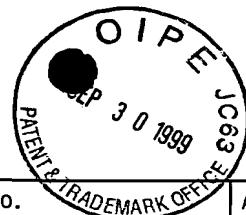
FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>					ATTY. DOCKET NO. 1488.0770007	U.S. PATENT & TRADEMARK OFFICE		APPLICATION NO. 09/340,690
					APPLICANT NI et al.			FILING DATE June 29, 1999
U.S. PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE	
FOREIGN PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
							Yes	
							No	
							Yes	
							No	
							Yes	
							No	
							Yes	
							No	
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)								
	AR	<u>18</u>	Tartaglia, L.A., et al., "The two different receptors for tumor necrosis factor mediate distinct cellular responses," Proc. Natl. Acad. Sci. USA 88:9292-9296 (1991)					
	AS	<u>18</u>	Tartaglia, L.A., and Goeddel, D.V., "Tumor Necrosis Factor Receptor Signaling," J. Biol. Chem. 267:4304-4307 (1992)					
	AT	<u>18</u>	Tartaglia, L.A., et al., "A Novel Domain Within the 55 kd TNF Receptor Signals Cell Death," Cell 74:845-853 (1993)					
	EXAMINER			9/10/9	DATE CONSIDERED			
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw Line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.								

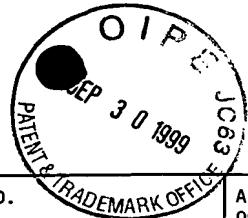


EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



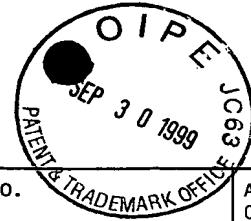
EXAMINER'S Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

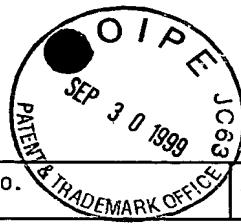




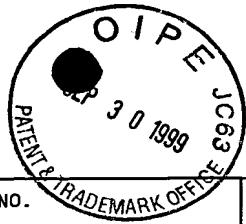
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

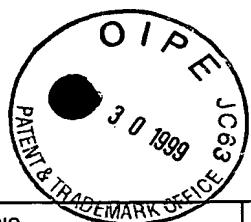


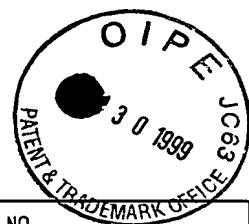




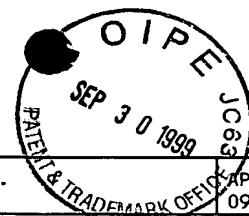
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.





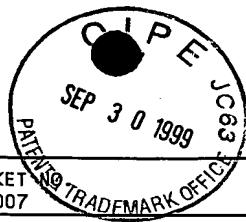


EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

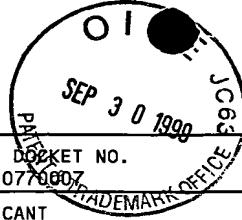


EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.





EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 INFORMATION DISCLOSURE STATEMENT	ATTY. DOCKET NO. 1488.0770007 APPLICANT NI et al.	APPLICATION NO. 09/340,690 FILING DATE June 29, 1999
-----------------------------------------------------------------	----------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------

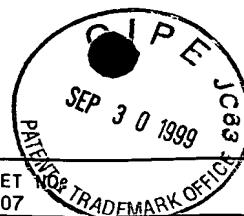
U.S. PATENT DOCUMENTS

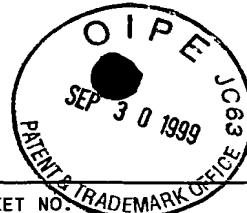
FOREIGN PATENT DOCUMENTS

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

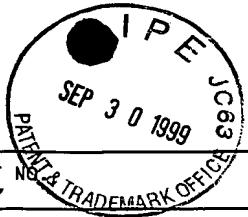
	AR	<u>32</u>	NCBI Entrez, GenBank Report, Accession No. AA418866, Hillier, L., et al. (October 1997)
	AS	<u>32</u>	NCBI Entrez, GenBank Report, Accession No. AA426526, Hillier, L., et al. (October 1997)
	AT	<u>32</u>	NCBI Entrez, GenBank Report, Accession No. AA430530, Hillier, L., et al. (October 1997)
EXAMINER 	DATE CONSIDERED		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

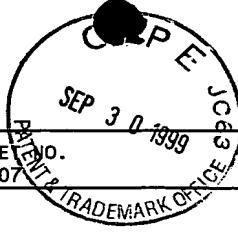




EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.



FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>		ATTY. DOCKET NO. 1488.0770007	APPLICATION NO. 09/340,690
		APPLICANT NI et al.	
		FILING DATE June 29, 1999	GROUP 16/6 <i>16/6</i>

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE
AA						
AB						
AC						
AD						
AE						
AF						
AD	08/509,824		Spear et al.			07/28/1995
AH						
AI						
AJ						
AK						

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION
AL						Yes No
AM						Yes No
AN2	WO 97/04658	02/13/1997	WIPO			Yes No
AO2	WO 98/25967	06/18/1998	WIPO			Yes No
AP						Yes No

OTHER (Including Author, Title, Date, Pertinent Pages, etc.)

AR		
AS		
AT		

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

FORM PTO-1449 SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT			ATTY. DOCKET NO. 1488.0770007	APPLICATION NO. 09/340,690			
			APPLICANT Ni et al.				
			FILING DATE June 29, 1999	GROUP 1646			
U.S. PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE	
AA							
AB							
AC							
AD							
AE							
AF							
AG							
<i>QA</i>	AH1	5,843,791	12/01/1998	Hauptmann et al.	436	501	06/07/1995
AI							
AJ							
AK							
FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	TRANSLATION	
AL						Yes No	
AM						Yes No	
AN						Yes No	
AO						Yes No	
<i>QA</i>	AP2	EP 0 393 438 A2	10/24/1990	Europe			Yes No
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)							
<i>QA</i>	AR	37	Kwon, B.S. et al., "A Newly Identified Member of the Tumor Necrosis Factor Receptor Superfamily with a Wide Tissue Distribution and Involvement in Lymphocyte Activation," J. Biol. Chem. 272:14272-14276 (May 1997)				
<i>AS</i>	AS	37	Supplementary Partial European Search Report, Issued in European Patent Application No. EP 959117662 on March 16, 2000.				
<i>AT</i>	AT						
EXAMINER <i>QA</i>				DATE CONSIDERED <i>qa</i>			
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.							